

IN THE ABSTRACT

Please cancel the originally filed Abstract and insert therefore the attached new Abstract (two copies enclosed).

IN THE CLAIMS

Please cancel claims 1-38 and insert therefore the following new claims:

--39. A grinding apparatus for grinding individual clothing elements of a textile machine, the clothing elements having a head portion defined by a bend or knee in each element, said grinding device comprising:

a first set of grinding elements mounted on a support so as to extend outwardly therefrom, said elements having a length and size so as to penetrate between the clothing elements to grind lateral flank portions of the clothing elements; and

a second set of grinding elements extending from said support a lesser distance than said first set of grinding elements, said second set of grinding elements disposed and having a size so as not to extend between the clothing elements but to contact and grind the front face sides of the clothing elements.

40. The grinding apparatus as in claim 39, wherein said support is a rotatable roller member.

41. The grinding apparatus as in claim 40, wherein said first and second sets of grinding elements are individual bristle-like elements extending radially from said rotatable roller member.

42. The grinding apparatus as in claim 41, wherein said roller member and bristle-like grinding elements form a brush, said second set of bristle-like grinding

elements having such that said brush can rest on the front faces of said clothing elements without said second set of grinding elements entering between said clothing elements.

43. The grinding apparatus as in claim 39, wherein at least one of said first and second sets of grinding elements are grinding stones.

44. The grinding apparatus as in claim 39, wherein said second set of grinding elements comprise a finer graining than said first set of grinding elements.

45. The grinding apparatus as in claim 39, further comprising a suction device disposed to draw a suction in the vicinity of the point of grinding between said grinding elements and the clothing elements to remove particles resulting from the grinding.

46. The grinding apparatus as in claim 45, wherein said suction device has a width so as to take a suction over the working width of the set of moving flats.

47. The grinding apparatus as in claim 39, wherein the textile machine is a carding machine and the individual clothing elements are arranged on a set of moving flats, said apparatus removably attachable to a frame of the carding machine for grinding the set of flats.

48. The grinding apparatus as in claim 39, further comprising a control system configured to intermittently engage and operate said apparatus during specific time periods of operation of the textile machine.

49. The grinding apparatus as in claim 48, wherein said control system operates said apparatus during said time periods to grind the clothing elements a predetermined number of times during each time period.

50. The grinding apparatus as in claim 39, wherein said apparatus is portable and mountable to different textile machines, said apparatus further comprising a supporting holder configured for being removably mountable to a frame component of different textile machines.

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51. A device for adjusting the distance between clothing elements provided on a clothing support and a grinding device in a textile machine, said device comprising means for effecting a contact force between said clothing elements and said grinding device so that said grinding device and clothing elements are pressed against each other and a predetermined entering depth of said clothing elements into said grinding device is established. *spring or hydr. cyl.*

52. The device as in claim 51, wherein said means for effecting a contact force comprises a movable support surface over which said clothing support is conveyed, said movable support configured to press said clothing support against said grinding device. (w)

53. The device as in claim 52, wherein said contact force is adjustable.

54. The device as in claim 51, wherein said grinding device comprises shorter and longer individual grinding elements, said means for effecting a contact force configured so that said shorter grinding elements contact against said clothing elements and said longer grinding elements pass between and alongside said clothing elements.

55. The device as in claim 52, wherein said means for effecting a contact force comprises at least one spring disposed to bias said movable support against said grinding device.

56. The device as in claim 52, wherein said means for effecting a contact force comprises at least one hydraulic cylinder disposed to exert a force on said movable support.

57. The device as in claim 52, wherein said movable support surface is movable from a position wherein it is operably disengaged from said clothing support to a position wherein it contacts and changes the traveling course of said clothing support.

58. The device as in claim 52, wherein said movable support surface comprises at least one ramped surface disposed to guide said clothing support up onto said movable support surface.

59. A system for use in a clothing element grinding process to identify particular flats of clothing elements of a set of revolving flats in a textile card machine, said system comprising at least one flat of said set of flats having a detectable mark applied thereto that distinguishes said flat from the other flats, and a sensor disposed to sense the flats in their revolving path and detect said marked flat, said sensor configured to generate a corresponding signal upon, said system further comprising a grinding process control unit receiving said signal from said sensor to control a grinding operation.

60. The system as in claim 59, wherein said control unit defines a grinding cycle upon detection of said marked flat such that all of said flats in said set of revolving flats is ground at least once.--
